

In The Claims:

1. (Previously Presented) An apparatus comprising:

a plurality of head-ends coupled to subscriber equipment via an access network, the head-ends coupled to each other via an inter-server network, each of the head-ends comprising:

a server for distributing requested video assets to requesting subscriber equipment via the access network;

a storage having a primary storage partition for storing frequently requested video assets and a secondary storage partition for storing infrequently requested video assets, the infrequently requested video assets being distributed amongst the secondary partitions of the head-ends; and

a manager adapted to manage migration of video assets, wherein the manager tracks asset request rates and threshold rates of respective video assets;

wherein the manager, in response to an infrequently requested video asset becoming frequently requested, selects at least one head-end from the plurality of the head-ends to store the frequently requested video asset and transmits the frequently requested video asset to the selected ones of the head-ends for storage in the respective primary storage partitions of the ones of the head-ends selected to store the frequently requested video asset;

wherein the manager, in response to a frequently requested video asset becoming infrequently requested, selects at least one of the head-ends to store the infrequently requested video asset and provides the infrequently requested video asset to the selected at least one of the head-ends for storage in the respective secondary storage partition of the at least one of the head-ends selected to store the infrequently requested video asset.

2. (Previously Presented) The apparatus of claim 1, wherein:

the manager is adapted to identify an infrequently requested video asset as becoming frequently requested when the asset request rate crosses above the threshold rate; and

the manager is adapted to identify a frequently requested video asset as becoming infrequently requested when the asset request rate crosses below the threshold rate.

3. (Previously Presented) The apparatus of claim 2, wherein:

in response to a request for a video asset received from requesting subscriber equipment, the manager is adapted to control distribution of the requested video asset from one of the head-ends identified as storing the requested video asset to the requesting subscriber equipment.

4. (Currently Amended) The apparatus of claim 3, wherein the manager comprises:

a content manager adapted to receive the request for the video asset and determine whether the requested video asset is stored locally in the storage of that head-end at which the video asset request is received or stored remotely in the storage of a different head-end;

a stream session manager adapted to direct the associated server to distribute streams of video assets to subscriber equipment requesting the video assets; and

a content session manager adapted to respond to video asset requests forwarded from managers of other ones of the head-ends.

5. (Cancelled)

6. (Previously Presented) The apparatus of claim 4, wherein a content manager of a local head-end at which a video asset request is received, in response to determining that a requested video asset is stored locally, is adapted to notify the stream session manager to deliver the requested video asset to the local server for transmission by the local server to the requesting subscriber equipment via the access network.

7. (Previously Presented) The apparatus of claim 4, wherein the content manager of a local head-end at which a video asset request is received, in response to determining that a requested video asset is stored remotely in the storage of a remote head-end, is adapted

to instruct the stream session manager of the local head-end to contact the content session manager of the remote head-end.

8. (Previously Presented) The apparatus of claim 7, wherein the content session manager of the remote head-end is adapted to identify the requested video asset in the storage of the remote head-end, allocate bandwidth for transmitting the requested video asset, and, in response to a determination that the requested video asset is to be provided from the remote head-end to the requesting subscriber equipment via the local head-end, notify the server of the remote head-end to transmit the requested video asset to the local head-end using the inter-server network.

Claims 9-18 (Cancelled)

19. (Currently Amended) A method of executing instructions on one or more processing devices such that the one or more processing devices perform the following comprising:

determining an asset request rate for each of video assets stored in each of a plurality of head-ends;

comparing the determined asset request rates with respective threshold rates of each of the video assets;

in response to an infrequently requested video asset stored on a secondary partition becoming a frequently requested video asset, selecting a plurality of the head-ends to store the frequently requested video asset and migrating the video asset stored on the secondary storage partition to the selected ones of the head-ends for storage in respective primary storage partitions of the ones of the head-ends selected to store the frequently requested video asset; and

in response to a frequently requested video asset stored in a primary storage partition becoming an infrequently requested video asset, selecting one of the head-ends to store the infrequently requested video asset and providing the video asset stored on the primary storage partition to the selected one of the head-ends for storage in the respective secondary storage partition of the one of the head-ends selected to store the infrequently requested video asset.

20. (Cancelled)

21. (Previously Presented) The method of claim 19, further comprising:

for each infrequently requested video asset that becomes a frequently requested video asset, removing the infrequently requested video asset from the secondary storage partition; and

for each frequently requested video asset that becomes an infrequently requested video asset, removing the infrequently requested video assets from each of the primary storage partitions of the head-ends on which the frequently requested video asset was stored.

22. (Previously Presented) The method of claim 19, further comprising:

receiving, at one of the head-ends, a request for a video asset;

identifying a head-end storing the requested video asset, wherein the head-end comprises one of the local head-end at which the video asset request is received or one of the other head-ends remote from the head-end at which the video asset request is received;

causing the identified head-end storing said requested video asset to begin providing the requested video asset; and

transmitting the requested video asset through an access network to the subscriber equipment initiating the video asset request.

23. (Previously Presented) The method of claim 22, wherein, when the identified head-end is the local head-end coupled directly to the requesting subscriber equipment, the local head-end provides the requested video asset to the requesting subscriber equipment via the access network.

24. (Previously Presented) The method of claim 23, wherein, when the identified head-end is one of the remote head-ends, the local head-end requests the requested video asset

from the remote head-end and the remote head-end provides the requested video asset to the local head-end via an inter-server network.

25. (Currently Amended) An apparatus comprising:

~~a plurality of head-ends coupled to subscriber equipment via an access network, the head-ends in communication with each other via an inter-server network, each of the head-ends comprising:~~

~~a server for~~configured to distributing requested video assets to a requesting subscriber equipment;

a storage having a primary storage partition for storing frequently requested video assets and a secondary storage partition for storing infrequently requested video assets selectively distributed amongst a plurality of head-ends comprising at least a local first head-end and a remote second head-end~~the head-ends~~; and

a manager adapted to control processing of video asset requests from the subscriber equipment and distribution of video assets to the requesting subscriber equipment, wherein the manager comprises:

a content manager adapted to receive a request for a video asset from the requesting subscriber equipment and determine whether the requested video asset is stored locally in the storage of ~~that~~the first head-end or stored remotely in the storage of ~~a~~the remote second head-end; and

a stream session manager adapted to direct the ~~local~~ server to distribute requested video assets to the requesting subscriber equipment; and

a content session manager adapted to receive asset requests forwarded from ~~other ones of the~~ plurality of head-ends, identify and retrieve requested video assets requested by content managers of ~~other ones of the~~ plurality of head-ends, and provide requested video assets to the ~~other ones of the~~ plurality of head-ends, wherein the manager, in response to an infrequently requested video asset becoming frequently requested, selects at least one head-end from the plurality of the head-ends

to store the frequently requested video asset and transmits the frequently requested video asset to the selected head-ends for storage in the respective primary storage partitions of the head-ends selected to store the frequently requested video asset, wherein the manager, in response to a frequently requested video asset becoming infrequently requested, selects at least one of the head-ends to store the infrequently requested video asset and provides the infrequently requested video asset to the selected at least one of the head-ends for storage in the respective secondary storage partition of the at least one of the head-ends selected to store the infrequently requested video asset.

26. (Cancelled)

27. (Currently Amended) The apparatus of claim 25, wherein the content manager, in response to determining that the requested video asset is stored locally, is adapted to notify the stream session manager to deliver the requested video asset to the a local server for transmission by the local server to the requesting subscriber equipment.

28. (Currently Amended) The apparatus of claim 25, wherein the content manager, in response to determining that the requested video asset is stored remotely in the storage of a different head-end, is adapted to instruct the stream session manager of the a local head-end to contact the content session manager of the remote head-end.

29. (Currently Amended) The apparatus of claim 28, wherein the content session manager of the remote head-end is adapted to identify the requested video asset in the storage of the remote second head-end and allocates bandwidth for transmitting the requested video asset.

30. (Currently Amended) The apparatus of claim 29, wherein, in response to a determination that the requested video asset is to be provided from the remote second head-end to the requesting subscriber equipment via the first local head-end, the content

session manager of the remote head-end is adapted to notify the server of the remote second head-end to transmit the requested video asset to the first local head-end.

31. (Currently Amended) The apparatus of claim 30, wherein, in response to a determination that the server of the local first head-end is available to receive the requested video asset from the remote second head-end, the server of the remote second head-end is adapted to stream the requested video asset to the local first head-end over the inter-server network.

32. (Currently Amended) The apparatus of claim 31, wherein the server of the local first head-end is adapted to receive the requested video asset from the server of the remote second head-end, wherein the received video asset is stored in the storage of the local first head-end.

33. (Currently Amended) The apparatus of claim 29, wherein, in response to a determination that the requested video asset is to be provided directly from the remote second head-end to the requesting subscriber equipment, the content session manager of the remote second head-end is adapted to request the stream session manager of the remote second head-end to allocate bandwidth for providing the requested video asset to the requesting subscriber equipment.

34. (Currently Amended) The apparatus of claim 33, wherein the stream session manager of the remote second head-end is adapted to notify the server of the remote second head-end to stream the requested video asset to the requesting subscriber equipment.